

IN THE SPECIFICATION

Page 2, line 13, delete the words "ones of".

Please **replace** the paragraph between lines 4 and 16 on page 2 with the following:

In order to solve this problem, a technology is given in Japanese Unexamined Patent Publication JP-A 7-115528 (1995). That is, according to that publication, a facsimile apparatus comprises automatic document feeding means; reading means; an image memory; transmission means; transmission-error detection means; and an error-page memory, wherein when a transmission error is detected by the transmission-error detection means, a number of a page involved in that transmission error is stored in the error page number memory, then transmission is stopped, ~~ones of~~ pages which are set on the automatic document feeding apparatus, which ~~ones~~ precede the transmission error page, are fed without being read, and reading of pages on and after the transmission error page is started again. Page 3, lines 17 and 18, replace the word "is" with -are-.

Please **replace** the passages between line 16 on page 3 and line 6 on page 5 with the following:

This may result in that image data of pages on and after the transmission error page ~~are~~ erased or stored separately. In the former case, data which ~~are~~ read previously must be read again, thus prolonging a time required for retransmitting that data from a facsimile apparatus. In the latter case, there exists a plurality of the same document data in a memory, thus leading to such a problem as troublesome page management for transmission or increases in a memory capacity required.

Moreover, the problem has an influence not only on the transmitter side but also on the receiver side, in such a way that when a trouble occurred on the side of the transmitter and a plurality of times of transmission is necessary, the same data ~~are~~ stored in a memory, thus leading to such various problems that the receiver side would output the same image data or that troublesome work is required to select desired items of the output.

A facsimile apparatus disclosed in Japanese Unexamined Patent Publication JP-A 4-255159 (1992) subtracts, in transmission, a number of pages outputted already from a number of pages of the total image data to be transmitted to obtain a number of pages yet to be sent and display the numbers of the pages thus obtained. JP-A 4-255159, in which data retransmission of documents is not taken into account, does not disclose any method for utilizing the number of pages whose data areis not transmitted yet, in retransmission.

Further the facsimile apparatus disclosed therein stores the number of a reception error page, for example, a page whose data areis not yet transmitted, in reading and transmission of data of documents, and displays the thus stored page number. Still another facsimile apparatus disclosed in Japanese Unexamined Patent Publication JP-A 5-145725 (1993) marks a document itself whose data is not yet transmitted so as to read and transmit again only thus marked documents in a data retransmission operation. JP-A 5-145725 does not disclose any method for utilizing the number of transmission error pages. In the facsimile apparatus of JP-A 5-145725 a mark indicative of transmission error is directly placed on a document, so that it is necessary to read data of error pages in retransmission. Therefore, it is difficult to apply the technology disclosed in JP-A 5-145725 to retransmission of data of documents by a facsimile apparatus of a memory transmission type.

Please **replace** the paragraph between line 16 on page 6 and line 2 on page 7 with the following:

According to the invention the image data transmitting apparatus has a function of adding discrimination data to discriminate between image data of which transmission is incomplete~~incomplete~~ and image data of which transmission is completed, based on data stored in the transmitted-sheets-number storing means. With this constitution, even when image data of which transmission is already completed is retransmitted, it is possible to smoothly and simply discriminate image data based on discrimination data on a reception side, thus eliminating a need for the reception side to be engaged in troublesome work of sorting received documents into already received documents and newly received documents.

Please **replace** the paragraph between lines 14 and 20 on page 12 with the following:

The scanner part 31 comprises: a document mounting table 35 ~~made of~~<sup>made of</sup> transparent glass; a both-surface corresponding automatic document feeding device (RADF) 36 for automatically supplying and conveying documents onto the document mounting table 35; and a document-image reading unit, i.e. scanner unit 40, for scanning and reading in images of a document mounted on the document mounting table 35.

Please **replace** the passages between line 1 on page 13 and line 2 on page 14 with the following:

The paper supply/conveyance part 33 has a housing which includes: a first cassette 51; a second cassette 52; a third cassette 53; and a manual-insertion multi-tray 54, and it also includes~~also does it have~~ a both-surface unit 55 for recording images on a back surface of a sheet of paper on which images sent from the housing are recorded.

Each~~The~~ cassette of the paper supply/conveyance part 33 ~~each~~ contains therein a bundle of forms of the corresponding size, so that when the operator selects any one of these cassettes that contains his desired size of forms, the forms are separated and supplied one by one from the cassette and then conveyed sequentially via a conveyance path 50 in the paper supply/conveyance part 33 to an electric-photograph processing unit in the laser recording part 32.

The RADF\_36 acts beforehand~~to beforehand~~ set a plurality of sheets of documents at a time on a predetermined document tray and then supply thus set documents one by one sheet by another onto the document mounting table 35 of the scanner unit 40.

Also, the RADF\_36 comprises: a conveyance path used for single-surface documents; a conveyance path used for both-surface documents; and conveyance-path switching means, in order to permit the scanner unit 40 to read single surfaces

or both surfaces of a document in response to an operator's selection. Further description of the RADF\_36 is omitted here because the RADF\_36 has conventionally been applied and put to commercial applications in many cases.

Please **replace** the paragraph between lines 16 and 20 on page 14 with the following:

The scanner part 31 is so configured that uses interlocked operations of the RADF\_36 and the scanner unit 40 to sequentially mount documents to be read onto the document mounting table 35, while moving the scanner unit 40 along the lower surface of the document mounting table 35, in order to read the document images.

Please **replace** the paragraph between line 24 on page 15 and line 9 on page 16 with the following:

Image data are~~An image data~~ is formed as an electrostatic latent image on a surface of the photosensitive drum 48 when the laser reading unit 46 scans a laser beam, which latent image is then transformed into a visible image with toner, which resultant toner image is then fixed by electrostatic transfer on a surface of a sheet of paper conveyed from the paper supply/conveyance part (multi-stage paper supply unit) 33. Then, the sheet of paper on which the image is thus formed is selectively conveyed from the fixing device 49 via the conveyance path 57 to the post-processing device 34 or via the conveyance path 56 to the both-surface unit 55.

Please **replace** the paragraph between line 21 on page 16 and line 5 on page 17 with the following:

Next, a configuration and functions of the image processing part 37, in the digital image forming apparatus shown in Fig. 1, for performing image processing on image data which are~~is~~ read are described below. Fig. 2 shows a block diagram of an electrical overall configuration of various units, image processing parts, and other components of the digital image forming apparatus 30, indicating such a situation that a main central processing unit (CPU) 401 positioned at the enter of Fig. 1 is

interlocked with sub-central processing units (CPUs) 101, 201, etc. installed for each unit, to manage the operations.

Please **replace** the paragraph between lines 7 and 14 on page 18 with the following:

In the configuration, ~~the~~The sub-CPU 101 on the operation panel board 100 communicates control data etc. with the main CPU 401, to give instructions to the digital image forming apparatus 30. The main CPU 401, on the other hand, transfers a control signal indicating an operation state of the digital image forming apparatus 30 to the sub-CPU 101, to display the operator an operation state indicating the current state of the apparatus on the LCD screen 104 of the operation panel 103.

Please **replace** the paragraph between lines 3 and 17 on page 20 with the following:

The sub-image processing board 500 is connected with a connector with the main image processing board 400 and comprises: a binary-value image processing part 501 controlled by the main CPU 401 on the main image processing board 400; a first storage part 502 consisting of a memory 502a for storing and managing binary-value data which ~~have~~has undergone image processing or control data used in processing and a gate array 502b for controlling the memory 502b; a second storage part 503 consisting of a hard disk device 503a and a gate array 503b for controlling the hard disk device 503a, for storing and managing a plurality of sheets of document image data to ~~repeatedly~~read out repeatedly the plurality of sheets of document images by as much as a desired number of sheets in order to generate a plurality of copies; and an external interface 504 consisting of an SCSI 504a and a gate array 504b for controlling the SCSI.

Please **replace** the paragraph between line 16 on page 21 and line 2 on page 22 with the following:

In the fax mode, for example such processing is performed as transmitting documents to a counterpart and receiving documents from the counterpart. First, processing of transmitting documents to the counterpart is described. A transmission document set at a predetermined position of the RADF\_36 of the digital image forming apparatus 30 is sequentially supplied one sheet by another onto the document mounting table 35 of the scanner unit 40. Images of the transmission document are sequentially read by the earlier mentioned configuration of the scanner unit 40, thereby transferring resultant 8-bit electronic data of the image to the main image processing board 400.

Please **replace** the passages between line 22 on page 22 and line 22 on page 23 with the following:

Next, when a transmission procedure with the counterpart is performed and a transmission-enabled state is established, data of document images to be transmitted which are read out and compressed in the predetermined format from the memory 502a are transferred to the side of the fax board 603 and, there, undergo necessary processing and then are transmitted sequentially via the communication line to the counterpart.

Next, processing of the document image data transmitted from the counterpart are described. When the document image data are transmitted via the communication line from the counterpart, the data are received while performing a communication procedure at the fax board 603. Thus received image data as compressed in the predetermined format are given from the fax interface provided to the binary-value image processing part 501 of the sub-image processing board 500 to the binary-value image processing part 501. The binary-value image processing part 501 uses a built-in compression/decompression processing part etc. to reproduce thus transmitted document image data into image data for each page.

Next, the document image data thus reproduced as image data per page is transferred to the side of the main image processing board 400 and undergoes y-

correction there. The laser controller 404 controls, based on data of thus corrected image data, reading operation of the images onto the photosensitive drum 48 so as to reproduce the images at the LSU\_46.

Please **replace** the paragraph between lines 6 and 10 on page 26 with the following:

When the user sets a document to the RADF\_36 and operates the operation key 105 on the operation panel 103, transmission starts. When a transmission operation is activated, a transmission procedure and a reading procedure are activated one by one and processed independently of each other.

Please **replace** the passages between line 23 on page 26 and line 17 on page 27 with the following:

The following will describe a first transmission process according to the invention by a fax machine including retransmission processing with reference to flowcharts shown in Figs. 3, 4A and 4B. According to a reading procedure shown in Fig. 3, after activation, first the process decides whether reading is for a first transmission or retransmission (step S130 in Fig. 3, which is hereinafter abbreviated as S130); and when it is judged as reading for the first transmission, the number of documents sheets for which image data are read (hereinafter described as read sheets) is reset to 0 (S131).

Next, the process picks up one sheet of a document (S132) and, when the document has reached a reading start position, the process starts reading (S133, S134). Image data read at the scanner part 31 are recorded in a scan buffer and compressed at the image compression/decompression part and then stored in a memory as data on the ((number of read sheets) + 1)'th page (S135). When the document does not reach at the reading start position within a predetermined lapse of time, a document misfeeding error occurs, to abnormally terminate the reading procedure (S136).

Please **replace** the paragraph between lines 6 and 10 on page 26 with the following:

When a memory-full event occurred in an image recording region during data areis being compressed (S140), the process, when being engaged in transmission, can sequentially delete data which has been transmitted, so goes on with compression processing immediately after a free space of the memory is secured and, otherwise, is not sure whether it can release the memory, so stops compression processing and abnormally terminates the reading procedure (S143, S144).

Please **replace** the paragraph between lines 9 and 16 on page 29 with the following:

When operations up to the training have been normally terminated, the process waits until data of images to be transmitted areis completely prepared (S111). When the data areis prepared, the process transmits image data of the ((number of transmitted sheets) + 1)'th page via the modem parts 603c and NCU603d (S112). When a communication trouble occurred during transmission of the image data, the process disconnects the line and performs error handling (S113, S117).

Please **replace** the paragraph between line 16 on page 30 and line 7 on page 31 with the following:

When, after the reading operation is finished and abnormally terminated and also it is impossible to resume reading of the remaining documents, the process displays a note of ((number of read sheets) – (number of transmitted sheets) + 1) as the number of returned sheets at the LCD\_104 on the operation panel 103 and notifies the user of a number of sheets, of the ejected documents, which must be set again for retransmitted (S121, S122). In this case, the user is instructed, according to the thus displayed number of returned sheets, to reset documents as many sheets as the number of returned sheets counting back from the last document according to the reading procedure and retransmits the documents manually. Up to that point in time, a main memory may be used due to facsimile transmission or reception, the process erases image data on the memory and terminates the transmission (S123).



Please **replace** the passages between line 21 on page 32 and line 16 on page 33 with the following:

In a transmission procedure shown in Figs. 6A and 6B, error handling performed upon line disconnection due to any one of~~one of~~ various troubles (S218-S220) is different from that in a transmission procedure for fax transmission processing. After a line is disconnected (S216), when reading is going on according to a reading procedure shown in Figs. 5A and 5B, first the process waits until reading is finished irrespective of whether the reading operation is normal or abnormal (S217). After reading is finished, the process decides whether the reading operation is normally terminated or not (S218) and, in the case of normal termination, enters a retransmission mode and activates a transmission procedure shown in Figs. 6A and 6B immediately after the retransmission conditions are satisfied.

In the case of abnormal termination of the reading operation, the process displays at the LCD\_104 on the operation panel 103 an instruction that the user should reset all documents (S219) and waits until the all documents are reset (S220). Immediately after the all documents are reset, the process enters a retransmission mode and, immediately after retransmission conditions are satisfied, activates a transmission procedure shown in Figs. 6A and 6B again.